

1     **ABSTRACT**

2             Systems and methods are described for profiling the power consumption of  
3 software instructions executing on a processor. A power measurement circuit  
4 records power consumption levels of a processor executing various software  
5 instructions. A profiling tool tracks and identifies the instructions being executed  
6 on the processor and generates an association between the instructions and the  
7 power consumed during execution of those instructions. The power profile  
8 enables the precise isolation and identification of instructions relative to amounts  
9 of power consumed during the execution of those instructions.

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